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Passed March 12th 1827

An

W. S. R.

Inaugural Thesis

On
Dysentery

By

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of Virginia

1826

Copy Book N. 1017

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August 1817

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Dysentery

Is a disease which has been treated of by practical writers, from the days of Hippocrates to the present time. The many discordant theories, and the still more numerous plans of cure, which have been advanced respecting it, form a labyrinth of opinions, some of which are based on facts recorded by experience while others have originated from blind devotion to principles false both in theory and practice. Nor is this discrepancy of opinion, confined to the ancients.

Among the moderns, we find many points of the pathology, as well as treatment the subjects of disputation. — One tells us, dysentery is closely allied to enteritis, and that venesection is the proper remedy. — Another says, stricture of the colon,

77 A Town feared a siege. Held Consultation
What was the best method of fortification
A grave skillful Mason gave his Opinion
That Nothing but Stone would secure the Dominion
A Carpenter I thought that was well spoke
'Twas better by far to defend it with Oak
A Currier wisser than both these together
Says, try what you please, there's nothing
like leather. }

or small intestines are the cause of the disease, preventing the fecal and other "feculent" matter from being discharged; therefore we must use purgatives. — A third asserts us that copious purging will induce a fatal debility, and that nothing but sudorifics can effect a cure.

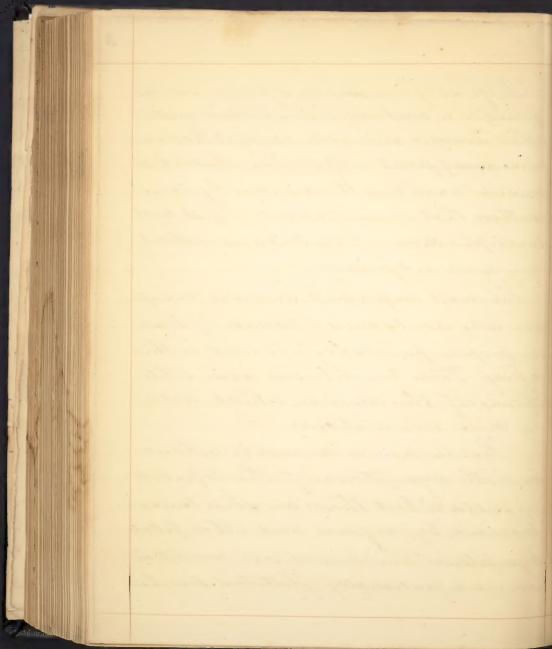
And a fourth considers mercury as a specific, and asserts that unless a ptyalism be excited, the patient will fall a victim to the disease. x x

Cullen defines dysentery to be "a contagious fever, in which the patient has frequent stools, accompanied with much griping, and followed by a tenesmus. The stools though frequent, are generally small in quantity, and the matter voided is chiefly mucus, sometimes mixed with blood. At the same time the natural feces seldom appear, and when they do, it is generally in a compact hardened form."

Dysentery occasionally assumes various forms, or is combined or complicated with other diseases, and accordingly it has received different appellations. Indeed so minute have been the divisions by some authors, that it amounted to a fastidious multiplication of distinctions without any real difference.

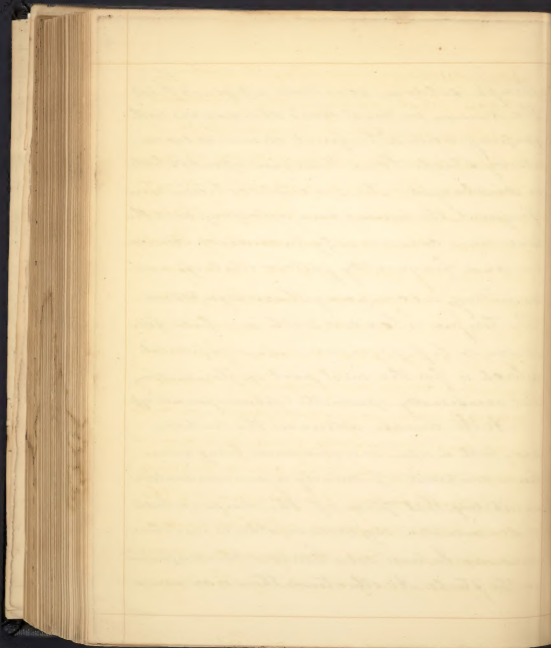
The most important divisions perhaps are into acute and chronic. Of these, we propose particularly to treat in this essay. There are however some other forms of the disease, which will be cursorily noticed.

The disease is commonly ushered in with symptoms of the local affection; but these are sometimes preceded by rigors, and other febrile symptoms. The bowels are constipated, and unusually flatulent. Diarrhoea



though seldom, sometimes appears firm. The disease in most cases commences with griping and a frequent desire to evacuate by stool. Some tenesmus often and little is discharged. The evacuations become more frequent, the termino men distressing, and the tenesmus considerably increased. Anorexia and frequently gastric distress, and vomiting, accompany these symptoms. The tongue is loaded with a white fur. More or less pyrexia is always present, which is for the most part inflammatory, but occasionally assumes the typhoid or putrid type.

As the disease advances the motions vary both in colour and consistence, being sometimes composed of merely a mucous matter, exhibiting that form of the disease, which is denominated dysenteria alba or morbus mucosus. In most cases however blood is present in the stools. At other times there is an acrid



watery discharge, resembling the washings
of raw flesh, emitting a very fetid odour,
sometimes pure florid blood is voided.

In some cases there is no discharge at all
Now and then small masses of matter of
a sebaceous nature are found on the evac-
uations. These were considered by Pringle
as actually cheese which had been
eaten by the patients, while Thomas con-
siders them as nothing more than mas-
ses of coagulated mucus. Sometimes
purulent matter and frequently a cancer
arising from gangrenous parts are discha-
ged, and occasionally films of a membra-
nous nature are to be seen in the stools.

Notwithstanding the frequency of the
evacuations, composed of these various
matters, it is but rarely we can perceive
any natural feces among them, and

when we do, they consist of small irregular
bales denominated scybala.

Doctor Johnson a writer on diseases of tropi-
cal climates, doubts whether fecal evac-
uations, in the form of scybala, ever appear
in this disease. However in cases the dysente-
ry of tropical climates may be from
this symptom, it is undoubtedly a gene-
ral concomitant of the disease as
it appears in our own country. And an
evacuation of this feculent matter wheth-
er by an effort of nature or by the
interference of art is attended with
a temporary mitigation of all the
symptoms, especially of the frequent
motions torminae, and tenesmus.

The violent efforts which are sometimes
made to discharge the irritating contents
of the alimentary canal, in some instances

occasions a prolapsus ani, which in ^{some} progress of the disease, proves a distressing and troublesome symptom. — There is also sometimes (as Trinkle observes) a stranguary proceeding from the inflammation of the rectum, extending to the neck of the bladder.

Diagnosis. Dysentery in its mildest form bears so close a resemblance to diarrhoea that the two diseases may be readily confounded. It is the opinion of nosologists however that diarrhoea is never contagious, and is unattended with fever and inflammation; that the evacuations, though not natural, are not bloody, and that the tormina and tenesmus are less severe. When the symptoms of the former are well developed, the diagnosis is easily established.

Dysentery may be distinguished

from cholera, by the great discharge of bile by vomiting and stool, which takes place in this latter disease, and from colic by the obstinate constipation, which always attends this affection.

Causes. As respects the remote causes of this disease, practitioners are by no means agreed. Excessive and long continued heats of summer and autumn, succeeded by much moisture induce a predisposition to this disease, and that it happens more frequently in warm than in cold climates.

It was formerly supposed to arise from a specific contagion, by which it was communicated from one individual to another. These accounts, investigations have exposed the fallacy of this opinion, as respects its general character. A late writer supports the proposition, that dysentery is of itself

never contagious, nor the intermittent and remittent forms of it; that only when combined with typhus, does it possess the characteristics of a contagious disease; and thus he insists originates in the contagion of fever and not in the virus specific to dysentery.

Sir J. Simpson & others have given it as their opinion, that the contagion arises from the clothes, evacuations, urine or perspiration of dysenteric patients; and more especially when the evacuations are suffered to stagnate in the patient's chamber. Neither of these suppositions are supported by evidence, that these discharges are capable of producing this effect. It has moreover been shown that dysentery may be contracted, though the greatest attention be paid to cleanliness of the patient and his chamber.

The dysentery of tropical climates seems

to be found in some manner or other, connected with
derangement of the liver, but whether the one is
a cause or effect of the other, seems not to have
been accurately determined, for sometimes the
hepatic affection, (we are told) precedes the dyspep-
sia, at other times succeeds it, and in some cases
symptoms of both diseases are blended from
the commencement to the termination of the case.

The disease also arises from the same causes
as our autumnal fevers & from acids & other
cor taken into the stomach. That it may a-
rise from a vitiated state of the atmosphere,
we are naturally led to conclude, from its
sometimes observing the laws of epidemics.

The fititudes of weather as from heat to
cold, thereby suppressing perspiration and
occasioning a determination to the intestines
excite the disease.

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Respecting the proximate cause of dysentery there are also various opinions.

As there is hardly a disease in the whole range of nosology, more uniform in its nature and symptoms than this, the discrepancy among authors must have arisen, no conceivably, in consequence, of mistaking prominent effects for proximate causes, and as the remedies administered to obviate the former, have frequently removed the latter, each individual was impressed with a belief, that he alone had discovered the true cause & cure of the disease.

While some believe that an acrid matter is generated in the intestines and by exciting their peristaltic motion, gives rise to the frequent evacuations, others maintain that the disease consists primarily, in a spasmodic constriction of some part of the colon.

Most generally, and especially, when arising from marsh effluvia, do we believe dysentery to be a disease of gastric origin. The morbid is caused first acting on the stomach producing nausea and vomiting, and ultimately extends to the intestines, which become its permanent seat, whence it pervades the whole system.

The proximate cause of this disease, then may be considered to consist, in an inflammatory affection of the large intestines, accompanied with fever.

The inflammation begins in the mucous coat, and is attended with little or no pain. Then extending to the muscular stricture, it occasions tormina or spasmodic constrictions of the intestines, which prevent the free evacuation of their irritating contents, which have been considered as a cause, instead of an effect of the disease.

The determination of blood to the intestinal tube, usually increases the action of the secretory vessels, and thus occasions a greater quantity of mucus to be secreted than in health. But sometimes, in consequence, of the inflammation transpiring the secretory point, there is no discharge at all. And at other times, owing to a deranged state of these vessels, the red blood destined for the purpose of secretion, is poured out unchanged into the intestines, and is thus discharged. If the inflammation is not arrested in due time, the peritoneum becomes involved and then arises those acute pains about the abdomen and other symptoms peculiar to inflammation of the serous tissue.

Prognosis. When dysentery is inclined to terminate fatally, pyrexia in a greater or less degree, usually attends throughout the whole course of the disease. the symptoms run high, and produce great prostration of strength, accompanied with fetid, and involuntary discharges, and this event may take place in a few days. But when the symptoms are moderate, it is frequently protracted to some length of time, and at last a gentle perspiration diffused over the whole body proves critical; the febrile symptoms and tormina then cease, and the evacuations becoming of a natural colour and consistence. — When the disease has existed for a long time, and has become habitual, it is often difficult to remove, and when it attacks per-

soms, labouring under chronic diseases, as phthisis pulmonalis &c, or those whose constitutions have been worn down by other diseases, it proves the precursor of death.

Tenesmus in a great degree, several terminated a very frequent inclination to go to stool, and in indulging which, but little is discharged, or none at all; or a discharge of puriflorid blood, great fever of the stools, much prostration of strength, violent pyrexia, a tenes at dexter, coldness of the extremities, cold clammy sweat, aphthae, Singultus, subitaneus tendinum and a weak irregular pulse denote the most imminent danger. On the contrary a gentle and universal diaphoresis, a moderate degree of pyrexia, the motions, assuming a more natural colour & consistence, and a gradual abatement of the tenes and tenesmus, indicate a favourable termination.

Post mortem examinations demonstrate to us, that ^{the} intestines, have been affected with inflammation and its consequences, such as gangrene, adhesions & contractions.

The colon and rectum, appear to have sustained the most extensive injury. The peritoneum also in many instances, exhibits traces of inflammatory action. And the liver not unfrequently, presents appearances of having been much disordered.

Of the method of Cure

If the pathological views of dysentery which have been detailed, are correct, the indications of cure, as deduced therefrom, must be sufficiently obvious. The disease appearing in its usual form, demands the reduction of inflammation, with morbid irritation, and a spasm, the free evacuation of the alimentary canal & the restoration of the healthy condition



of the surface.

If the inflammatory symptoms be urgent, and the patient plethoric and vigorous, and sometimes, even when this latter condition does not exist, venesection, repeated as often as circumstances may require, is indispensable. If employed thus early in the disease, it has a tendency to arrest the progress of inflammation, to prepare the system for the operation of medicines, to relax the spasm of the intestines which prevent the free evacuation of the alimentary canal; and not infrequently to assist the removal of the spasm of the cutaneous vessels.

Sometimes even after we have employed bloodletting as far as is consistent with safety, the abdomen remains tense and unyielding. In this case, it will be necessary to employ leeches or cups, of which



the former applied in large numbers are preferable.

In some cases the stomach is loaded with bile, and other irritating matters creating much gastric distress. Here venesection being promised, an emetic will be obviously proper. For besides relieving the stomach of its irritating contents, it assists in resolving the spasm, and determines to the surface. To answer this purpose, tartarized antimony alone or in combination with ipecacuanha may be employed.

At this stage of the disease, purgatives a most important class of remedies in the treatment, are introduced to clear the bowels. The extent to which purging should be carried, is a point which has been much discussed; but the opinion seems now to be pretty well established, that the most beneficial effects are derived from them, when employed like natural stools appear. For it is evident, that as long as the irritated matters caused by previous irritation, remain on the



already inflamed intestines, we cannot expect to overcome the disease.

It is usual to commence with the mild cathartics such as Castor oil, but from the tendency which this medicine has to run off, in most instances, without producing a sufficient impression we deem it incompetent to the complete removal of the feculent matter and one of opinion that it answers better as an auxiliary to more active medicines.

In the miasmatic district of country in which we reside, the practitioners entertaining groundless fears, of inducing an alarming state of debility, very seldom employ purgation, but are in the habit of administering at the onset of the disease a solution of castor emulsion and Sulphate of soda, in combination, the usual effect of which is a copious evacuation of the alimentary canal. They then resort to mercurial purges



These latter medicines, on the testimony of the highest authority, are justly entitled to the greatest confidence. They may be used alone, or in combination with Stimulant, the operation being promoted by laxative injections.

The use of opium, in dysentery, has been as loudly applauded, as unconditionally condemned. Yet here as in many other instances, it is the abuse only, which has brought odium on a valuable medicine. If given alone opium will probably be injurious, particularly in primary attacks, and in young and plethoric habits. If alternated with purgatives, it will be attended with little, if any advantage. But if combined with calomel, in an early stage of the disease, and with ipecac at a later period, it will prove a most valuable auxiliary, to these medicines, both by preventing any intestinal

irritation, from the one, and by increasing the diaphoretic effect of the other.

When free evacuations have been procured by mercurial purges, castor oil and Epsom salts, may be used, to prevent the accumulation of feculent matter, which by keeping up an incessant irritation, never fails to aggravate the disease.

After arterial action has been lessened, by the foregoing means, we resort to diaphoretics to restore the healthy condition of the surface.

Among others Richter considers dysentery as a rheumatic affection of the bowels; and in conformity with this theory, it is the practice, to induce a copious diaphoresis to the exclusion of menses. Though this practice may be successful, in that particular form of the disease, arising

From suppressed perspiration which in some instances, bears an inconsiderable analogy to rheumatism or catarrh, yet its general application will be found extremely detrimental.

Doctor Muriel a writer on the diseases of tropical climates, concurs with Sydenham, in considering dysentery, as the fever of the season turned in on the bowels, by a very sudden suppression of the perspiration. The restoration of this perspiration therefore forms his leading, indeed almost his sole object, in the treatment of the disease. Hence after purging the system by blood-letting if necessary, and evacuating the bowels, he relies almost exclusively on sudorifics.

While evacuations are still necessary, a combination of Calomel, Epecacuanha and opium, will be found, to allay irritation, determine to the surface, and gently open the bowels.

Ipecacuanha alone, or in combination, has been long celebrated as a remedy in this disease. Indeed it is considered, to exert a specific effect, but in what manner, has always been a subject of dispute. While some, as Cullen & Baker, believe that its utility depends on its purging effect, others with more plausibility, impute its efficacy to the relaxation of spasm and the determination to the surface which it induces. Some practitioners are of opinion, that it may be most advantageously employed, in those cases, where the greatest quantity of blood is discharged.

The administration, of the preparations of antimony, at this stage of the disease, has been ably advocated, but the weight of authority is decidedly, in favour of *Ipecacuanha*.

As auxiliary to the emetic plan, warmth externally applied, in the form of *Unguentum*

tations, to the abdomen, is useful by allaying pain and spasm and inducing diapnoea. And for this purpose, cloths wrung out of a warm decoction of chamomile flowers and poppy heads, may be employed. Bathing the region of the stomach, with the tincture of opium, camphorated spirits, and the tincture of Capsicum, will afford much relief.

The warm Bath is also recommended, and is particularly applicable to the cases of children. But from its prompt efficacy and the facility, with which it may be ^{employed}, the vapour Bath is the best mode, in which warmth can be applied.

As a substitute for the warm Bath, the Flannel roller (the credit of introducing which is due to Professor Chapman) may be advantageously employed. This consists, in a broad Flannel bandage, passed round

times round the abdomen with some degree of lightness. It answers the purposes of promoting perspiration and affording support to the weakened intestines.

If the disease be not subdued by the means already detailed, position becomes necessary. To attain this end, it is usual to apply a large blister to the abdomen. By thus applying it near the diseased part, the effect is much more prompt and certain, than if applied to the extremities, as is sometimes done.

The remedies recommended to allay tormina and tenesmus, are the oleaginous mixture, the opiateous julep, or a combination of opium and ipecacuanha. Simple opium has had the desired effect. Anodyne injections, consisting of opium dissolved in mucilage of gum arabic, or as creating less irritation, a simple piece of opium, introduced into the rectum. Likewise injections of fresh mutton butter or

Land, are spoken of as highly efficacious, in relieving these troublesome symptoms.

When this disease arises in crowded places, such as camps, jails, hospitals, and ships, it is apt to assume the typhoid type. Hence it is evident, that the treatment, to be adapted to this modification of the disease, must differ materially from the foregoing.

In this case, venesection is only admissible at the very commencement of the disease. But in determining on the propriety of this latter remedy, the pulse should not be our only guide, as it is sometimes in an oppressed condition, when we have reason to suspect that, as well as congestions of the great viscera, the employment of the vapour bath & friction will, we are told, frequently cause the pulse to rise, and induce a state, in which venesection may be resorted to, not only with safety, but evident advantage. If however

general bloodletting be inadmissible. Leeching or cupping may be employed. And after some impression is made by these means, emetics, followed by moderate evacuations of the alimentary canal, should be used. The patient should be freely bled, and small doses of mercury administered to induce a ptyalism.

As auxiliary to mercury the nitric acid has been recommended, and as still better, the nitromuriatic acid in the form of a bath.

In the sinking state, the system should be supported by the carbonate of ammonia, opium and the spirits of turpentine.

When dysentery is blended with intermittent fever, it is now the established practice to endeavour, first, to remove the bowel affection, and then to administer the remedies adapted to the form of fever, with which it is associated.

Dysentery is denominated chronic, when after the acute symptoms are removed, there remains some tenderness of the alimentary canal; the evacuations are small and consist of very filia mucus and pectent matter; the appetite is bad, the tongue heavily furmed the pulse is small, hard, and quick, accompanied by a dry and parched skin, the complexion is sallow, and the expression of countenance meagre and ghastly.

The symptoms in this case evidently denote, that the blood is determined from the surface to the great viscera. The indication then is to be met by diaphoretics.

If necessary however small bleedings should precede the use of these medicines calculated to restore the healthy condition of the surface.

As a means of relaxing the surface,

and maintaining an equable perspiration, there is perhaps no medicine more highly recommended than doves powder, and particularly in this form of dysentery. A gram or two of ipecacuanha, with a little opium, given several times a day, is also said to be very serviceable by producing a determination to the surface.

It is here that the funnel roller, a remedy, before mentioned, is said to display its greatest efficacy.

If the disease prove obstinate, and more especially if we have reason to suspect hepatic derangement, calomel should be administered in minute doses. It is from the remarkable ability of this medicine, in dysentery, when combined with hepatic affections, that the practice has become general in warm climates, of administering it at the stage of the disease.

Dr. Johnson in his work on the diseases of tropical climates, has pointed out the connexion between dysentery and the derangement of the functions of the stomach and liver. He recommends large doses of calomel combined with small portions of opium.

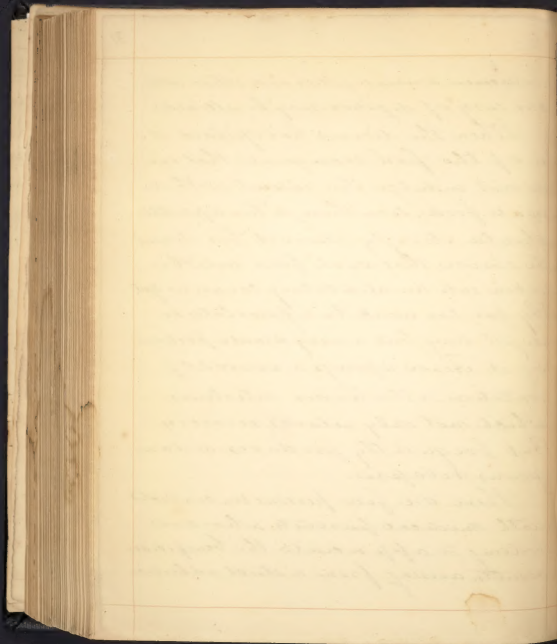
When the convalescence proves lingering, and there is a constant or occasional diarrhoea, opiates, astringents, and mild tonics, may be resorted to with advantage. But most confidence is to be placed in opium and in some cases in a change of climate.

The diet of the patient is of the utmost importance in this disease. It should consist of the lightest food and that in a fluid state, such as barley water, mucilage of gum arabic, slippery elm sage arrow root, &c. &c. &c.

valerianæ, animal jellies and other articles easy of digestion may be allowed.

When the disease has yielded it is of the first consequence, that we do not indulge the patient with animal food, even though his appetite should strongly desire it. For it must be obvious, that such food will be taken into an alimentary canal as yet, by far too weak to assimilate or digest any but a very small portion of it. Hence springs a source of irritation, to the tender intestines, which not only retards recovery, but frequently produces a dangerous relapse.

There are few persons unconnected with medical pursuits, who are willing to appreciate the beneficial results, arising from a strict adherence



to regimen in all acute diseases. Indeed
so much is this the case, that there are
many, who never believe, that a patient
is recovering, until his appetite returns
and then that his strength will be
regained in proportion to the quantity
of aliment which he consumes.

Deluded by this idea the friends of
of the patient often exert an injudicious
kindness, which is not unfrequently
production of the most serious con-
sequences.

